

CAS ONLINE PRINTOUT

=> D HIS

(FILE 'REGISTRY' ENTERED AT 06:48:28 ON 19 NOV 2007)

DELETE HIS

L1 STRUCTURE UPLOADED
L2 24 S L1
L3 STRUCTURE UPLOADED
L4 19 S L3
L5 STRUCTURE UPLOADED
L6 0 S L5
L7 24 S L5 FUL

FILE 'CAPLUS' ENTERED AT 07:00:47 ON 19 NOV 2007

L8 3 S L7

FILE 'REGISTRY' ENTERED AT 07:19:22 ON 19 NOV 2007

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L10 STRUCTURE UPLOADED
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L12 21 S L10 FUL

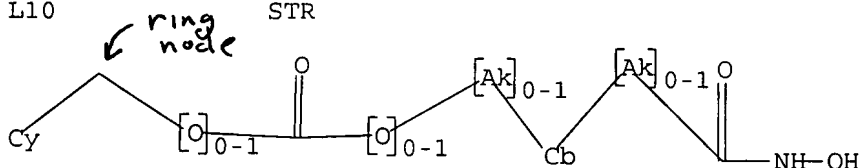
FILE 'CAPLUS' ENTERED AT 07:21:18 ON 19 NOV 2007

L13 1 S L12

=> D L10

L10 HAS NO ANSWERS

L10 STR



G1 Cy,Ak

Structure attributes must be viewed using STN Express query preparation.

=> D BIB

L13 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2004:633904 CAPLUS

DN 141:173976

TI Preparation of [(hydroxyamino)carbonyl]phenyl cyclohexanecarboxylates as HDAC inhibitors

IN Finn, Paul W.; Kalvinsh, Ivars; Loza, Einars; Gutcaits, Aleksandrs; Olutnika, Irena; Serpionova, Ludmila; Gailite, Vija; Bokaldere, Rasma

PA Topotarget UK Limited, UK

SO PCT Int. Appl., 186 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004065354	A1	20040805	WO 2004-GB147	20040119
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI				

CAS ONLINE PRINTOUT

AU 2004205372	A1	20040805	AU 2004-205372	20040119
CA 2513246	A1	20040805	CA 2004-2513246	20040119
EP 1583736	A1	20051012	EP 2004-703207	20040119
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2006517532	T	20060727	JP 2006-500216	20040119
US 2006058282	A1	20060316	US 2005-542281	20050715
PRAI US 2003-440616P	P	20030117		
WO 2004-GB147	W	20040119		
OS MARPAT 141:173976				
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD				
ALL CITATIONS AVAILABLE IN THE RE FORMAT				

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CAS ONLINE PRINTOUT

=> D HIS

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DELETE HIS

L1 STRUCTURE UPLOADED
L2 24 S L1
L3 STRUCTURE UPLOADED
L4 19 S L3
L5 STRUCTURE UPLOADED
L6 0 S L5
L7 24 S L5 FUL

FILE 'CAPLUS' ENTERED AT 07:00:47 ON 19 NOV 2007

L8 3 S L7

FILE 'REGISTRY' ENTERED AT 07:19:22 ON 19 NOV 2007

L9 STRUCTURE UPLOADED
L10 STRUCTURE UPLOADED
L11 0 S L10
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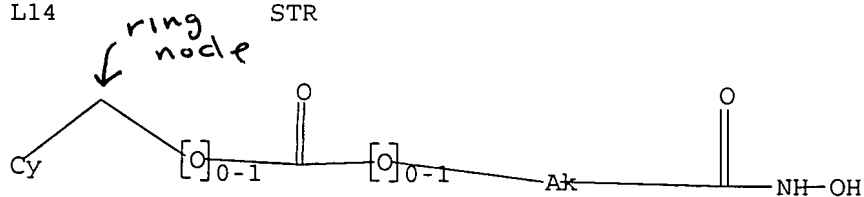
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L16 0 S L14 FUL

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L14 STR



G1 Cy,Ak

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CAS ONLINE PRINTOUT

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(FILE 'REGISTRY' ENTERED AT 06:48:28 ON 19 NOV 2007)

DELETE HIS

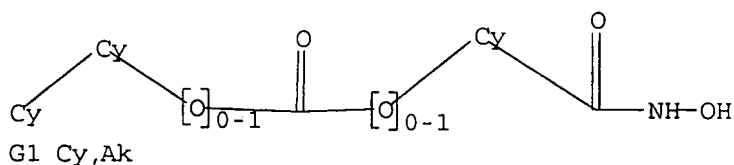
L1 STRUCTURE UPLOADED
L2 24 S L1
L3 STRUCTURE UPLOADED
L4 19 S L3
L5 STRUCTURE UPLOADED
L6 0 S L5
L7 24 S L5 FUL

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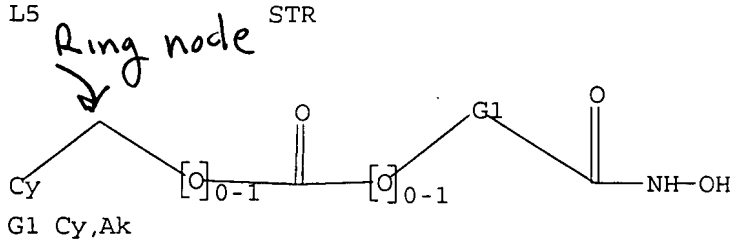


Structure attributes must be viewed using STN Express query preparation.

=> D L5

L5 HAS NO ANSWERS

L5 STR



Structure attributes must be viewed using STN Express query preparation.

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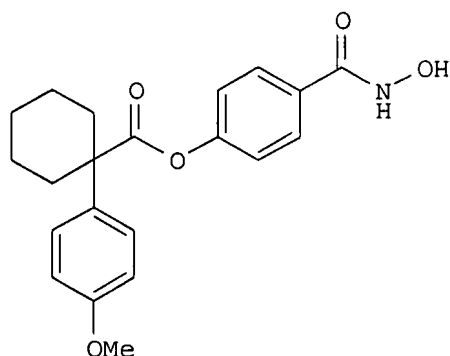
L8 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:633904 CAPLUS
DN 141:173976
TI Preparation of [(hydroxyamino)carbonyl]phenyl cyclohexanecarboxylates as HDAC inhibitors
IN Finn, Paul W.; Kalvinsh, Ivars; Loza, Einars; Gutcaits, Aleksandrs; Olutnika, Irena; Serpionova, Ludmila; Gailite, Vija; Bokaldere, Rasma
PA Topotarget UK Limited, UK
SO PCT Int. Appl., 186 pp.
CODEN: PIXXD2
DT Patent

CAS ONLINE PRINTOUT

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004065354	A1	20040805	WO 2004-GB147	20040119
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI				
	AU 2004205372	A1	20040805	AU 2004-205372	20040119
	CA 2513246	A1	20040805	CA 2004-2513246	20040119
	EP 1583736	A1	20051012	EP 2004-703207	20040119
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	JP 2006517532	T	20060727	JP 2006-500216	20040119
	US 2006058282	A1	20060316	US 2005-542281	20050715
PRAI	US 2003-440616P	P	20030117		
	WO 2004-GB147	W	20040119		
OS	MARPAT 141:173976				
GI					



AB This invention pertains to title N-hydroxybenzamides CyQ1JQ2CONHOH [I; wherein J = independently OCO, CO₂, CO; Cy = independently (un)substituted carbocyclyl, heterocyclyl, aryl; Q1 = independently (un)substituted divalent bidentate group; Q2 = independently (un)substituted alkylene(arylene), arylene(alkylene), alkylene-arylene-alkylene; and pharmaceutically acceptable salts, solvates, amides, esters, ethers, chemical protected forms, and prodrugs thereof], which were prepared as histone deacetylase (HDAC) inhibitors. The present invention also pertains to pharmaceutical compns. of I, the use of such compns. and compns. to inhibit HDAC, and the treatment of conditions mediated by HDAC, such as cancer, proliferative conditions, psoriasis, etc. (no clin. data). For example, N-(benzyloxy)-4-hydroxybenzamide was coupled with 1-(4-methoxyphenyl)cyclohexanecarbonyl chloride in THF to give the ester (52%). Deprotection using 5% Pd/C in MeOH provided II (PX118478) in 64% yield. The latter inhibited HDAC in human cervical adenocarcinoma (HeLa) cells with IC₅₀ of 32 nM and demonstrated antiproliferative activity against HeLa cells, HPV E7 transformed human keratinocyte (K11) cells, and human T-cells (JURKAT) with IC₅₀ values of 4.6 μM, 13.6 μM, and 500 nM, resp.

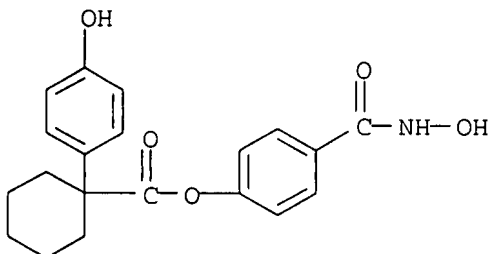
IT 733052-01-2P, 4-[(Hydroxyamino)carbonyl]phenyl
1-[4-(hydroxy)phenyl]cyclohexanecarboxylate
RL: BYP (Byproduct); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

CAS ONLINE PRINTOUT

(HDAC inhibitor; preparation of [(hydroxyamino)carbonyl]phenyl cyclohexanecarboxylates as HDAC inhibitors for treatment of proliferative disorders)

RN 733052-01-2 CAPLUS

CN Cyclohexanecarboxylic acid, 1-(4-hydroxyphenyl)-, 4-[(hydroxyamino)carbonyl]phenyl ester (CA INDEX NAME)

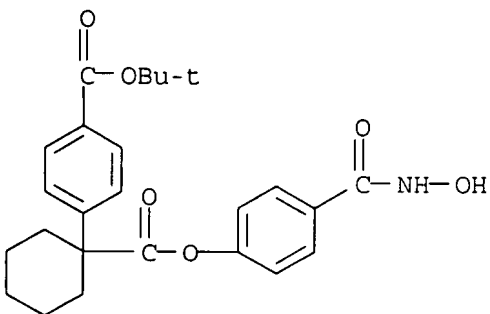


IT 733051-78-0P, PX 118926

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(HDAC inhibitor; preparation of [(hydroxyamino)carbonyl]phenyl cyclohexanecarboxylates as HDAC inhibitors for treatment of proliferative disorders)

RN 733051-78-0 CAPLUS

CN Benzoic acid, 4-[1-[4-[(hydroxyamino)carbonyl]phenoxy]carbonyl]cyclohexyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)



IT 733051-23-5P, PX 118478 733051-41-7P, PX 118479
733051-50-8P, PX 118480 733051-75-7P, PX 119101
733051-76-8P, PX 118925 733051-81-5P, PX 118959
733052-10-3P, PX 118966 733052-12-5P, PX 119058
733052-13-6P, PX 119059 733052-14-7P, PX 119061
733052-15-8P, PX 119062 733052-16-9P, PX 119064
733052-17-0P, PX 119065 733052-18-1P, PX 119084
733052-34-1P, PX 119100 733052-35-2P, PX 119063
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733052-42-1P, PX 119102

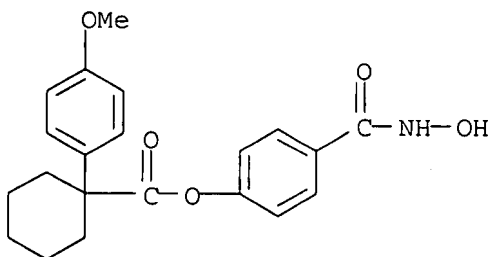
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(HDAC inhibitor; preparation of [(hydroxyamino)carbonyl]phenyl cyclohexanecarboxylates as HDAC inhibitors for treatment of proliferative disorders)

RN 733051-23-5 CAPLUS

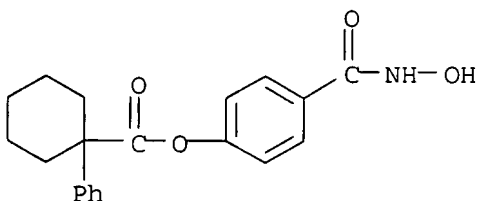
CAS ONLINE PRINTOUT

CN Cyclohexanecarboxylic acid, 1-(4-methoxyphenyl)-, 4-
[(hydroxyamino)carbonyl]phenyl ester (CA INDEX NAME)



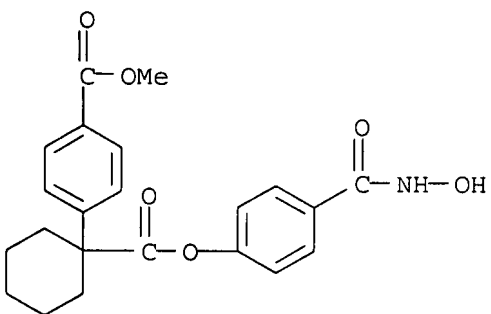
RN 733051-41-7 CAPLUS

CN Cyclohexanecarboxylic acid, 1-phenyl-, 4-[(hydroxyamino)carbonyl]phenyl
ester (CA INDEX NAME)



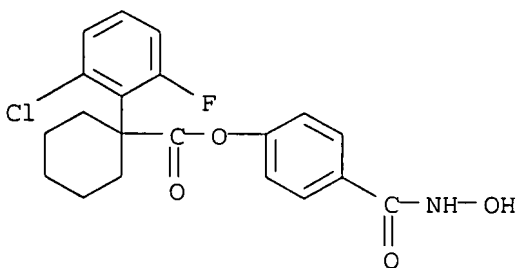
RN 733051-50-8 CAPLUS

CN Benzoic acid, 4-[1-[[4-[(hydroxyamino)carbonyl]phenoxy]carbonyl]cyclohexyl
]-, methyl ester (CA INDEX NAME)



RN 733051-75-7 CAPLUS

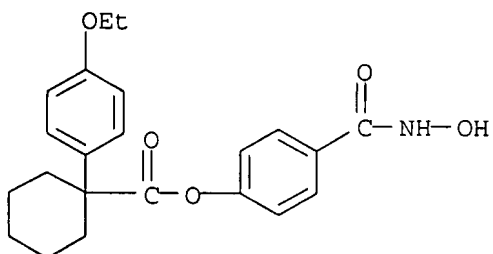
CN Cyclohexanecarboxylic acid, 1-(2-chloro-6-fluorophenyl)-, 4-
[(hydroxyamino)carbonyl]phenyl ester (CA INDEX NAME)



CAS ONLINE PRINTOUT

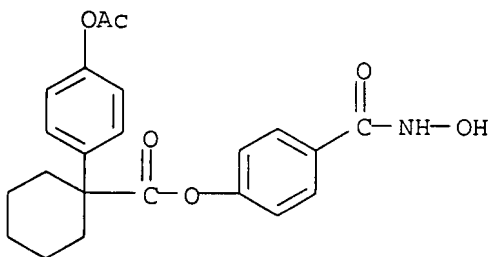
RN 733051-76-8 CAPLUS

CN Cyclohexanecarboxylic acid, 1-(4-ethoxyphenyl)-, 4-
[(hydroxyamino)carbonyl]phenyl ester (CA INDEX NAME)



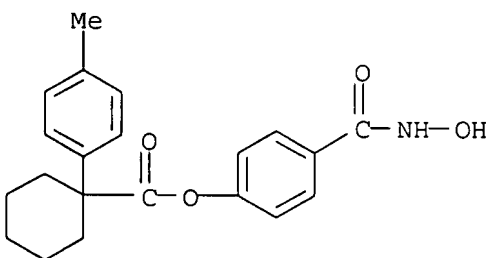
RN 733051-81-5 CAPLUS

CN Cyclohexanecarboxylic acid, 1-[4-(acetyloxy)phenyl]-, 4-
[(hydroxyamino)carbonyl]phenyl ester (CA INDEX NAME)



RN 733052-10-3 CAPLUS

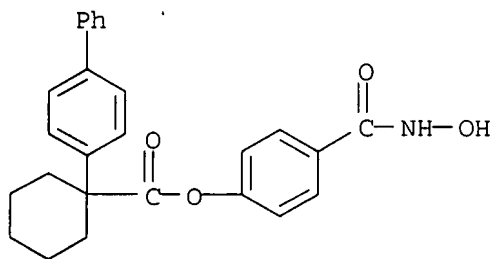
CN Cyclohexanecarboxylic acid, 1-(4-methylphenyl)-, 4-
[(hydroxyamino)carbonyl]phenyl ester (CA INDEX NAME)



RN 733052-12-5 CAPLUS

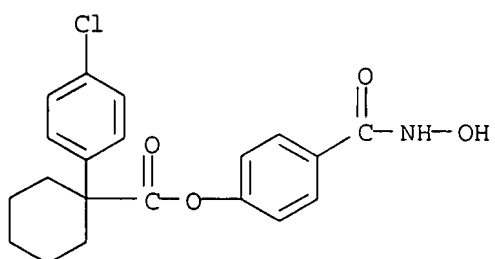
CN Cyclohexanecarboxylic acid, 1-[1,1'-biphenyl]-4-yl-, 4-
[(hydroxyamino)carbonyl]phenyl ester (CA INDEX NAME)

CAS ONLINE PRINTOUT



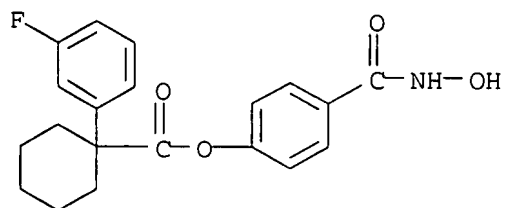
RN 733052-13-6 CAPLUS

CN Cyclohexanecarboxylic acid, 1-(4-chlorophenyl)-, 4-[(hydroxyamino)carbonyl]phenyl ester (CA INDEX NAME)



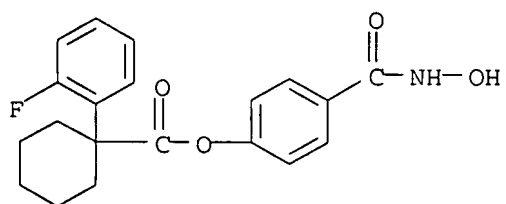
RN 733052-14-7 CAPLUS

CN Cyclohexanecarboxylic acid, 1-(3-fluorophenyl)-, 4-[(hydroxyamino)carbonyl]phenyl ester (CA INDEX NAME)



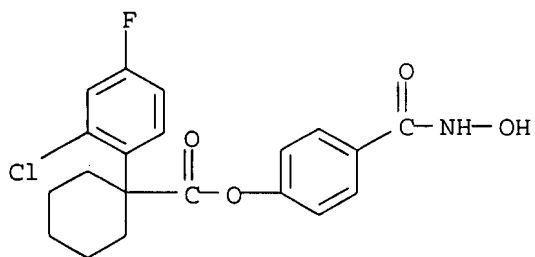
RN 733052-15-8 CAPLUS

CN Cyclohexanecarboxylic acid, 1-(2-fluorophenyl)-, 4-[(hydroxyamino)carbonyl]phenyl ester (CA INDEX NAME)



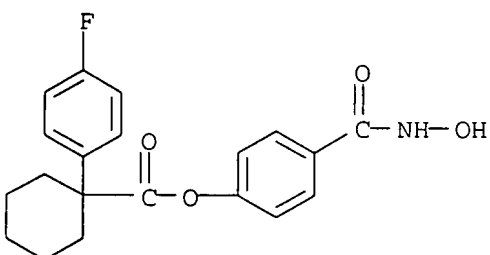
RN 733052-16-9 CAPLUS

CN Cyclohexanecarboxylic acid, 1-(2-chloro-4-fluorophenyl)-, 4-[(hydroxyamino)carbonyl]phenyl ester (CA INDEX NAME)



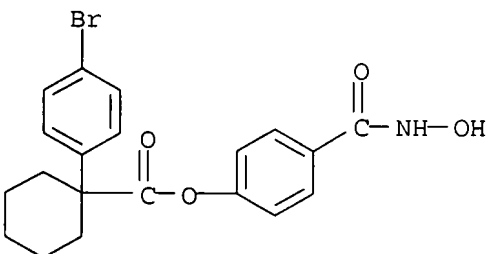
RN 733052-17-0 CAPLUS

CN Cyclohexanecarboxylic acid, 1-(4-fluorophenyl)-, 4-[(hydroxyamino)carbonyl]phenyl ester (CA INDEX NAME)



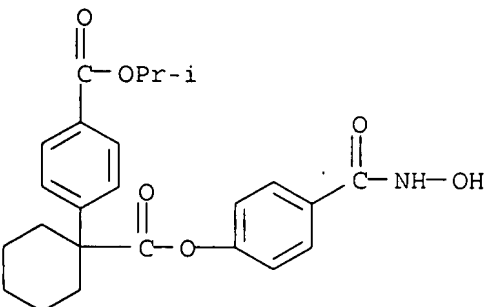
RN 733052-18-1 CAPLUS

CN Cyclohexanecarboxylic acid, 1-(4-bromophenyl)-, 4-[(hydroxyamino)carbonyl]phenyl ester (CA INDEX NAME)



RN 733052-34-1 CAPLUS

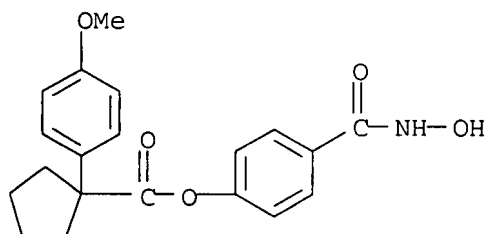
CN Benzoic acid, 4-[1-[[4-[(hydroxyamino)carbonyl]phenoxy]carbonyl]cyclohexyl]-, 1-methylethyl ester (CA INDEX NAME)



CAS ONLINE PRINTOUT

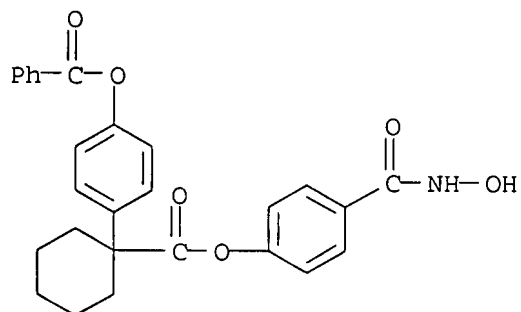
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CN Cyclopentanecarboxylic acid, 1-(4-methoxyphenyl)-, 4-
[(hydroxyamino)carbonyl]phenyl ester (CA INDEX NAME)



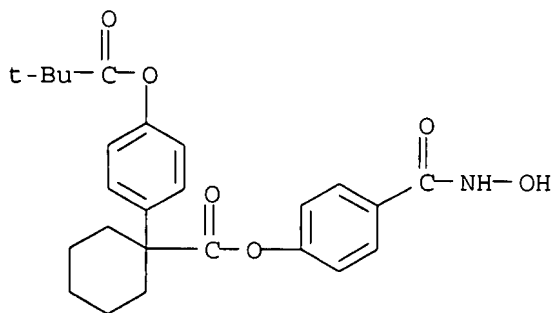
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[(hydroxyamino)carbonyl]phenyl ester (CA INDEX NAME)



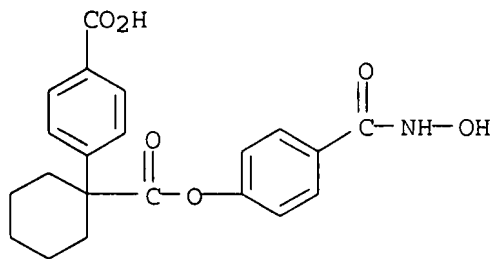
RN 733052-41-0 CAPLUS

CN Cyclohexanecarboxylic acid, 1-[4-(2,2-dimethyl-1-oxopropoxy)phenyl]-, 4-
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RN 733052-42-1 CAPLUS

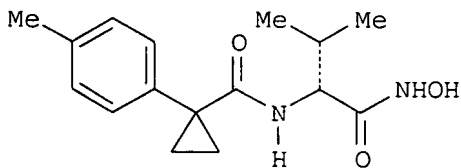
CN Benzoic acid, 4-[1-[[4-[(hydroxyamino)carbonyl]phenoxy]carbonyl]cyclohexyl]-
(CA INDEX NAME)



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2000:725603 CAPLUS
DN 133:296654
TI Preparation of N-acyl- α -aminohydroxamic acids as matrix
metalloproteinase, TNF- α , and aggrecanase inhibitors
IN Duan, Jingwu
PA Du Pont Pharmaceuticals Company, USA
SO PCT Int. Appl., 131 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000059874	A1	20001012	WO 2000-US8362	20000330
	W: AU, BR, CA, CN, CZ, EE, HU, IL, IN, JP, KR, LT, LV, MX, NO, NZ, PL, RO, SG, SI, SK, TR, UA, VN, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2366264	A1	20001012	CA 2000-2366264	20000330
	EP 1165500	A1	20020102	EP 2000-921500	20000330
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	JP 2002541138	T	20021203	JP 2000-609387	20000330
	US 6376665	B1	20020423	US 2000-540057	20000331
	US 2003032803	A1	20030213	US 2002-74357	20020212
	US 6689771	B2	20040210		
PRAI	US 1999-127635P	P	19990402		
	WO 2000-US8362	W	20000330		
	US 2000-540057	A3	20000331		
OS	MARPAT 133:296654				
GI					



I

AB RCR1R2NRb'COR3R4R4a [R = COR5, CO₂H, CO₂R6, CONHOR5, etc.; R1 = H, (hetero)cycloalkyl(alkyl), etc.; R2,R4,R4b' = H, (un)substituted (heteroatom-interrupted)alkyl, etc.; R3 = UXYZUaXaYaX1Za; R4a = H, alkyl,

CAS ONLINE PRINTOUT

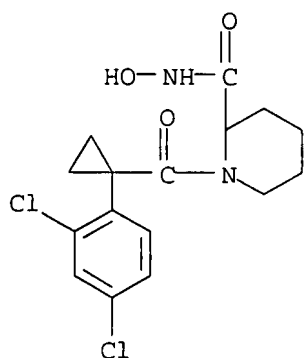
phenyl(alkyl); R5 = H or (un)substituted alkyl; R6 = acyl(oxy)alkyl, Ph, CO2Ph, etc.; U,Ua = bond, O, (alkyl)imino, CO, etc.; X,X1Xa = alk(en)ylene, alkynylene; Y,Ya = bond, O, (alkyl)imino, SO0-2, etc.; Z = bond, (hetero)cycloalkylene; Za = H or (hetero)cycloalkyl were prepared as matrix metalloproteinase, TNF- α , and aggrecanase inhibitors (no data). Thus, (R)-BocNHCH(CHMe2)CO2H was amidated by PhCH2ONH2 and the deprotected product amidated by 1-(4-methylphenyl)cyclopropanecarboxylic acid to give, after O-deprotection, title compound I.

IT 301162-17-4P 301162-18-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of N-acyl- α -aminohydroxamic acids as matrix metalloproteinase, TNF- α , and aggrecanase inhibitors)

RN 301162-17-4 CAPLUS

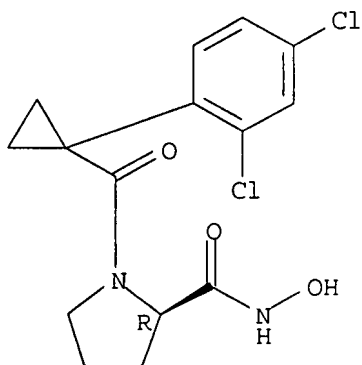
CN 2-Piperidinecarboxamide, 1-[[1-(2,4-dichlorophenyl)cyclopropyl]carbonyl]-N-hydroxy- (CA INDEX NAME)



RN 301162-18-5 CAPLUS

CN 2-Pyrrolidinecarboxamide, 1-[[1-(2,4-dichlorophenyl)cyclopropyl]carbonyl]-N-hydroxy-, (2R)- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1999:811204 CAPLUS

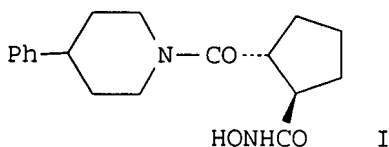
DN 132:49888

TI Cyclic hydroxamic acids as metalloproteinase inhibitors

CAS ONLINE PRINTOUT

IN Xue, Chu-Baio; Decicco, Carl P.; He, Xiaohua
 PA Du Pont Pharmaceuticals Company, USA
 SO PCT Int. Appl., 222 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9965867	A1	19991223	WO 1999-US13723	19990617
	W: AU, BR, CA, CN, CZ, EE, HU, IL, IN, JP, KR, LT, LV, MX, NO, NZ, PL, RO, SG, SI, SK, TR, UA, VN, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2333554	A1	19991223	CA 1999-2333554	19990617
	AU 9946923	A	20000105	AU 1999-46923	19990617
	EP 1087937	A1	20010404	EP 1999-930371	19990617
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO				
	JP 2002518368	T	20020625	JP 2000-554694	19990617
	US 6429213	B1	20020806	US 1999-335086	19990617
	US 2003139597	A1	20030724	US 2002-177235	20020620
	US 6858626	B2	20050222		
PRAI	US 1998-89557P	P	19980617		
	US 1999-127599P	P	19990402		
	US 1999-335086	A3	19990617		
	WO 1999-US13723	W	19990617		
OS	MARPAT 132:49888				
GI					



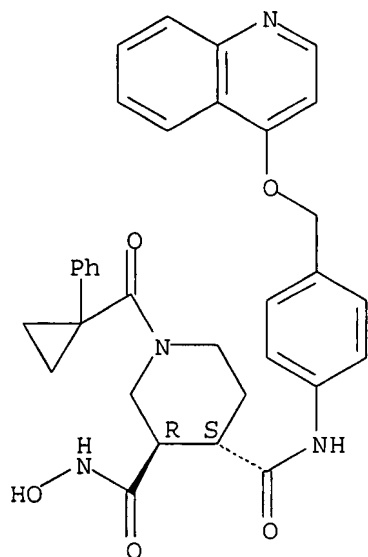
AB Title cyclic hydroxamic acids were prepared which are useful as metalloprotease inhibitors (no data). Thus, trans-1,2-cyclopentanedicarboxylic acid was amidated with 4-phenylpiperidine and treated with NH₂OH to give the hydroxamide I.

IT 252918-07-3P
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of cyclic hydroxamic acids as metalloproteinase inhibitors)

RN 252918-07-3 CAPLUS

CN 3,4-Piperidinedicarboxamide, N3-hydroxy-1-[(1-phenylcyclopropyl)carbonyl]-N4-[4-[(4-quinolinylloxy)methyl]phenyl]-, (3R,4S)- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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